

IN THE CLAIMS:

[[1]] 1. (Currently Amended) An apparatus ~~Apparatus~~ for causing paper webs to tear off within rewinding machines, the apparatus comprising: the said

a rewinding machine including a web-feeding roller having a tubular jacket outer surface, said tubular jacket outer surface having a plurality of openings;

5 a web [[(2)]] having transverse perforation lines ~~being provided~~; at regular intervals, one perforation line and another perforation line defining a sheet of said web ~~with transverse perforation lines which subdivide the web into sheets joined to each other but able to be separated in correspondence of said perforation lines, the apparatus comprising~~

a pneumatic tearing means ~~to cause the~~ for tearing of [[the]] said web [[(2)]] upon ~~the~~
10 ~~passage of a~~ receiving one of said perforation lines of said web [[(p)]] which separates [[the]] a last sheet of a log being formed (RO) ~~in the course of formation~~ from [[the]] a first sheet of [[the]] a next log to be formed, wherein said pneumatic tearing means ~~are of pneumatic type~~ (SP) ~~able to direct~~ comprises a reservoir of compressed air and a plurality of nozzles associated with a plurality of solenoid valves, said plurality of nozzles and said plurality of solenoid valves

15 producing a jet of compressed air in a direction of said one of said perforation lines ~~toward the~~ said line (p), wherein said pneumatic means (SP) comprise a set of nozzles (7) associated, via corresponding solenoid valves (70), with a reservoir of compressed air (71), the said nozzles [[(7),]] ~~with the respective~~ said solenoid valves [[(70)]] and [[the]] reservoir [[(71)]] being positioned ~~internally to a~~ within said web [[(2)]]- feeding roller, said openings receiving said jet
20 of compressed air via said nozzles, (RA) whose outer surface is delimited by a tubular jacket

(72) provided with a plurality of openings (73) through which the nozzles (7) are allow to act, characterized in that said tubular jacket [(72)] rotating rotates about [(its)] a longitudinal axis thereof, said reservoir being fixed such that said reservoir does not rotate about a longitudinal axis thereof while said reservoir (71) is stationary.

5 [(2)] 2. (Currently Amended) An apparatus ~~Apparatus~~ according to claim 1, characterized in that the wherein said tubular jacket [(72)] is fixed to [(the)] a driving shaft [(8)] of [(the)] said web-feeding roller (RA) ~~by means of~~ via a flange [(87)] and is supported, on [(the)] a side of [(the)] said driving shaft [(7)], by a first stationary part [(80)] with ~~the interposition of~~ a bearing [(81)] located between said driving shaft and said first stationary part, [(the)] said flange (87) ~~exhibiting~~ including a seat for a conical casing [(82)] inside which an axial extension of [(the)] said reservoir [(71)] is located, [(the)] said reservoir [(71)] being integrally connected solid, on the opposite side, to a second stationary part, said second stationary part being located opposite said first stationary part, said reservoir (84) and having a sleeve [(85)] positioned thereon on which [(the)] said tubular jacket outer surface [(72)] is mounted with ~~the interposition of a corresponding~~ another bearing [(86)] located between said tubular jacket outer surface and said sleeve.

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3) - 5) (Canceled)

6. (New) An apparatus for causing paper webs to tear off within rewinding machines,

the apparatus comprising:

a rewinding machine including a web-feeding roller having a tubular jacket outer surface, said tubular jacket outer surface having a plurality of openings;

5 a web having a plurality of transverse perforation lines, one perforation line and another perforation line defining a sheet, said plurality of transverse perforation lines including a selected perforation line, said selected perforation line defining a last sheet of a log being formed and a first sheet of a next log to be formed;

10 a conical housing located within said web-feeding roller, said conical housing defining a reservoir, said reservoir being filled with compressed air;

a plurality of solenoid valves;

15 a plurality of nozzles associated with a plurality of solenoid valves, said plurality of nozzles and said plurality of solenoid valves producing a jet of compressed air in a direction of said selected perforation line, said nozzles with said solenoid valves being positioned within said web-feeding roller, said openings receiving said jet of compressed air via said nozzles, said tubular jacket rotating about a longitudinal axis thereof, said reservoir being fixed such that said reservoir does not rotate about a longitudinal axis thereof.

7. (New) An apparatus according to claim 6, wherein said tubular jacket is fixed to a driving shaft of said web-feeding roller via a flange and is supported, on a side of said driving shaft, by a first stationary part with a bearing located between said driving shaft and said first stationary part, said flange including a seat for a conical casing inside which an axial extension

5 of said reservoir is located, said reservoir being integrally connected to a second stationary part, said second stationary part being located opposite said first stationary part, said reservoir having a sleeve positioned thereon on which said tubular jacket outer surface is mounted with another bearing located between said tubular jacket outer surface and said sleeve.

8. (New) An apparatus for causing paper webs to tear off within rewinding machines, the apparatus comprising:

a rewinding machine including a winding roller and a web-feeding roller having a tubular jacket outer surface, said tubular jacket outer surface having a plurality of openings;

5 a first core;

a second core;

a web having a plurality of transverse perforation lines, one perforation line and another perforation line defining a sheet, said plurality of transverse perforation lines including a selected perforation line, said selected perforation line defining a last sheet of applied to said first core and a first sheet applied to said second core, said winding roller receiving said web via said web-feeding roller, said winding roller applying said web to said first core until said first core receives a preset number of sheets, said winding roller applying said web to said second core when said first core has received said preset number of sheets, said winding roller rotating at a first speed such that said web is in a non-stretched state, said winding roller rotating at a second speed such that a portion of said web in an area of said selected perforation line is in a stretched state, said first speed being less than said second speed;

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a conical housing located within said web-feeding roller, said conical housing defining a reservoir, said reservoir being filled with compressed air;

a plurality of solenoid valves;

20 a plurality of nozzles associated with a plurality of solenoid valves, said plurality of nozzles and said plurality of solenoid valves producing a jet of compressed air in a direction of said selected perforation line such that said jet of compressed air separates said web at said selected perforation line, said winding roller rotating at said second speed such that said portion of said web in said area of said selected perforation line is in said stretched state when said
25 selected perforation line is separated via said jet of compressed air, said nozzles with said solenoid valves being positioned within said web-feeding roller, said openings receiving said jet of compressed air via said nozzles, said tubular jacket rotating about a longitudinal axis thereof, said conical housing being fixed such that said conical housing does not rotate about a longitudinal axis thereof.

9. (New) An apparatus according to claim 8, wherein said tubular jacket is fixed to a driving shaft of said web-feeding roller via a flange and is supported, on a side of said driving shaft, by a first stationary part with a bearing located between said driving shaft and said first stationary part, said flange including a seat for a conical casing inside which an axial extension
5 of said reservoir is located, said reservoir being integrally connected to a second stationary part, said second stationary part being located opposite said first stationary part, said reservoir having a sleeve positioned thereon on which said tubular jacket outer surface is mounted with another

bearing located between said tubular jacket outer surface and said sleeve.